

# ASH GROVE CEMENT COMPANY



WESTERN REGION

January 28, 2004

Puget Sound Clean Air Agency  
Attn: Fred Austin  
110 Union Street, Suite 500  
Seattle, Washington 98101

VIA CERTIFIED U.S. MAIL, No. 7002 2410 0004 7307 2126

*Re: Submittal of 40 CFR § 63.10 (e) (3) "Summary Report -- Gaseous Emission and Continuous Monitoring System Performance", and §63.1354 (b) (4), Ash Grove Cement Company Plant - Seattle Washington*

Dear Mr. Austin:

In accordance with the provision of § 63.10 (e) (3), (e)(3)(v)-(viii) and §63.1354(b)(8)-(10), Ash Grove Cement Company is submitting this semi annual report entitled - "Summary Report -- Gaseous and Continuous Monitoring System Performance".

**Contact Person:** Gerald J. Brown  
Safety and Environmental Manager  
3801 East Marginal Way South  
Seattle, Washington 98134-1113  
(206) 623-5596

**63.10 (e)(3)(vi)(A): Company name and address of the affected source:** Ash Grove Cement Company, 3801 East Marginal Way South, Seattle WA 98134

**63.10 (e)(3)(vi)(B): An identification of each hazardous air pollutant monitored at the affected source:** Dioxin/Furans, Ash Grove monitors the kiln baghouse inlet temperature as a parametric indicator of dioxin/furan emissions.

**63.10 (e)(3)(vi)(C): The beginning and ending dates of the reporting period:**  
July 1, 2003 to December 31, 2003

**63.10 (e)(3)(vi)(D): A brief description of the process units:** The in-line kiln/raw mill system includes an ID fan, the main baghouse dust collector, the Raw Mill, preheater/precalciner, and rotary kiln. The system converts dry raw materials prepared in the raw mill into cement clinker by heating it to the point of incipient infusion in the preheater/ precalciner and kiln. New chemical compounds are formed in the clinkering process that produce the hydraulic properties of portland cement. The system is heated by fossil fuels that are combusted at the lower or clinker discharge end of the inclined rotary kiln and in the precalciner and tire derived fuel is introduced to the system at the precalciner. The flow of combustion products is countercurrent to the flow of raw materials down the kiln.

**63.10 (e)(3)(vi)(E):** The emission and operating parameter limitations specified in the relevant standard(s):

Dioxin/Furans: 0.4 ng/dscm if APCD inlet temperature <= 204 degrees C, 0.2 ng/dscm of APCD inlet temperature > 204 degrees C.

Kiln operating limit: Temperature limits for the kiln were established effective December 19, 2002 and are 167.8 degrees C/334 degrees F (raw mill on) and 255.5 degrees C/492 degrees F (raw mill off). Per letter dated October 18, 2002, the coal mill operating limits at the inlet to the coal mill baghouse are 93.3 degrees C/200 degrees F.

**63.10 (e)(3)(vi)(F):** The monitoring equipment manufacturer(s) and model number(s):

Location	Transmitter		Detector	
	Manufacturer	Model	Manufacturer:	Model
Main baghouse	Rosemount	3044C	Eustis/Pyrocom	MAJ73U12000D
Coal Mill #1	Rosemount	3144C	Eustis/Pyrocom	RTA13180T000
Coal Mill #2	Rosemount	3144C	Eustis/Pyrocom	RTA13180T000

**63.10 (e)(3)(vi)(G):** The date of the latest CMS certification or audit: October 13, 2003

**63.10 (e)(3)(vi)(H):** The total operating time of the affected sources during the reporting period: Total operating time for the Kiln. 3231.8 Hours

Total operating time for the Raw Mill. 2616.8 Hours

**63.10 (e)(3)(vi)(I):** An emission data summary (or similar summary if the owner or operator monitors control system parameters), including the total duration of excess emissions during the reporting period (recorded in minutes for opacity and hours for gases), the total duration of excess emissions expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total duration of excess emissions during the reporting period into those that are due to startup/shutdown, control equipment problems, process problems, other known causes, and other unknown causes;

CMS EXCESS EMISSION AND PARAMETER EXCEEDENCES DATA SUMMARY				
1. DURATION OF EXCESS EMISSION (EE) OR PARAMETER EXCEEDENCES (PE) IN REPORTING PERIOD DUE TO:*				
	KILN	RAW MILL	COAL MILL	
			#1	#2
A. STARTUP/SHUTDOWN	0.0	0.0	0.0	0.0
B. CONTROL EQUIPMENT PROBLEMS	0.0	0.0	0.0	0.0
C. PROCESS PROBLEMS	0.0	0.0	0.0	0.0
D. OTHER KNOWN CAUSES	0.0	0.0	0.0	0.0
E. UNKNOWN CAUSES	0.0	0.0	0.0	0.0
1. TOTAL DURATION OF EXCESS EMISSIONS	0.0	0.0	0.0	0.0
2. $\frac{\text{Total EE (PE) Duration} \times 100}{\text{Total Source Operating Time}} =$	0.0	0.0	0.0	0.0

\*Unit of Time in hours for all temperatures.

†If the total duration of excess emissions or process parameter control exceedences for the reporting period is less than 1 percent of the total operating time for the reporting period, and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report shall be submitted, and the full excess emissions and continuous monitoring system performance report need not be submitted unless required by the Administrator. If the total duration of excess emissions or process control system parameter exceedences for the reporting period is 1 percent or greater of the total operating time for the reporting period, or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, both the summary report and the excess emissions and continuous monitoring system performance report shall be submitted.

Regulatory Citation: 40 CFR 63.10(e)(3)(vi)(A)-(M)

63.1354(b)(9)(i). All exceedences of maximum control device inlet temperature specified in 63.1344(a) and (b).

<u>Event</u>	<u>From</u>	<u>To</u>
None		

63.10(e)(3)(vi)(J). A CMS performance summary (or similar summary if the owner or operator monitors control system parameters), including the total CMS downtime during the reporting period (recorded in minutes for opacity and hours for gases), the total duration of CMS downtime expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total CMS downtime during the reporting period into periods that are due to monitoring equipment malfunctions, nonmonitoring equipment malfunctions, quality assurance/quality control calibrations, other known causes, and other unknown causes;

CMS PERFORMANCE SUMMARY*				
1.CMS DOWNTIME IN REPORTING PERIOD DUE TO: *				
	KILN	RAW MILL	COAL MILL	
			#1	#2
A. MONITORING EQUIPMENT MALFUNCTIONS	0.0	0.0	0.0	0.0
B. NON-MONITORING EQUIPMENT MALFUNCTIONS	0.0	0.0	0.0	0.0
C. QUALITY ASSURANCE/QUALITY CONTROL CALIBRATIONS	0.0	0.0	0.0	0.0
D. OTHER KNOWN CAUSES	0.0	0.0	0.0	0.0
E. OTHER UNKNOWN CAUSES	0.0	0.0	0.0	0.0
2.TOTAL CMS DOWNTIME	0.0	0.0	0.0	0.0
3.TOTAL DURATION OF EXCESS EMISSIONS X (100) / TOTAL SOURCE OPERATING TIME †	0.0	0.0	0.0	0.0

\*Unit of Time in hours for all temperatures.

†If the total duration of excess emissions or process parameter control exceedences for the reporting period is less than 1 percent of the total operating time for the reporting period, and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report shall be submitted, and the full excess emissions and continuous monitoring system performance report need not be submitted unless required by the

Administrator. If the total duration of excess emissions or process control system parameter exceedances for the reporting period is 1 percent or greater of the total operating time for the reporting period, or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, both the summary report and the excess emissions and continuous monitoring system performance report shall be submitted.

Regulatory Citation: 40 CFR 63.10(e)(3)(vi)(A)-(M)

**63.10 (e)(3)(vi)(K): A description of any changes in CMS, processes, or controls since the last reporting period.**

No changes were made to the CMS, processes, or controls since the last reporting period.

**63.1354(b)(9)(ii). All failures to calibrate thermocouples and other temperature sensors as required under 63.1350(f)(7):**

There were no failures to calibrate thermocouples and other temperature sensors as required during the reporting period.

**63.1354(b)(9)(iii). All failures to maintain the activated carbon injection rate, and the activated carbon injection carrier gas flow rate or pressure drop, as applicable, as required under 63.1344 (c):**

This requirement is not applicable to the Seattle kiln system at this time.

**63.1354(b)(9)(iv). The results of any combustion system inspections conducted within the reporting period under 63.1350(i):**

#### **ASH GROVE CEMENT COMPANY**

#### **Annual Combustion Inspection**

#### **Summary Report**

**Reporting Period: July 1, 2003 to December 31, 2003**

**Inspection conducted during the kiln outage on: Nov 4<sup>th</sup>- 7<sup>th</sup>, 2003**

#### **Results of the combustion system component inspection:**

-Outer Refractory, Axial and swirl primary air channel, coal channel, and pilot igniter tip all in excellent condition.

-Inner cooling channel cover plate had 6 new locking tabs installed to ensure it remained in place. Two tabs had fallen off so all tabs were removed and replaced. These items were replaced as normal preventive maintenance due to heat erosion and were never in such a state to affect the combustion worthiness of the burner.

**63.1354(b)(9)(v): All failures to comply with any provision of the operation and maintenance plan developed in accordance with 63.1350 (a):**

There were 4 occasions during the reporting period where a malfunction report required by the standard operating procedure in the operation and maintenance plan was not completed for equipment shutdown. We have no reason to believe other than normal standard operating procedures were followed in each case. However, there are no specified records showing that. Records indicated all system interlocks functioned as defined in the O & M plan during the shutdown. These failures did

not result in an excess of the emission limitations or operating parameter specified in section 63.10 (e)(3)(vi)(E) of this report.

63.1354(b)(4). As required by 63.10(d)(5), if the actions taken by an owner or operator during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan specified in 63.6(e)(3), the owner or operator shall state such information in a semiannual report. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period. The startup, shutdown, and malfunction report may be submitted simultaneously with the excess emissions and continuous monitoring system performance reports.

-Actions taken to correct malfunctions during the reporting period were consistent with the startup, shutdown, and malfunction plan.

63.10(d)(5)(i). *Periodic startup, shutdown, and malfunction reports.* If actions taken by an owner or operator during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan [see § 63.6(e)(3)], the owner or operator shall state such information in a startup, shutdown, and malfunction report. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period, and they must include the number, duration, and a brief description of each startup, shutdown, or malfunction. The startup, shutdown, and malfunction report shall consist of a letter, containing the name, title, and signature of the owner or operator or other responsible official who is certifying its accuracy, that shall be submitted to the Administrator semiannually (or on a more frequent basis if specified otherwise in a relevant standard or as established otherwise by the permitting authority in the source's title V permit). The startup, shutdown, and malfunction report shall be delivered or postmarked by the 30th day following the end of each calendar half (or other calendar reporting period, as appropriate). If the owner or operator is required to submit excess emissions and continuous monitoring system performance (or other periodic) reports under this part, the startup, shutdown, and malfunction reports required under this paragraph may be submitted simultaneously with the excess emissions and continuous monitoring system performance (or other) reports. If startup, shutdown, and malfunction reports are submitted with excess emissions and continuous monitoring system performance (or other periodic) reports, and the owner or operator receives approval to reduce the frequency of reporting for the latter under paragraph (e) of this section, the frequency of reporting for the startup, shutdown, and malfunction reports also may be reduced if the Administrator does not object to the intended change. The procedures to implement the allowance in the preceding sentence shall be the same as the procedures specified in paragraph (e)(3) of this section.


Listed below are the number, duration, and brief description of each startup, shutdown or malfunction.

**ASH GROVE CEMENT COMPANY**  
**PERIODIC STARTUP, SHUTDOWN& MALFUNCTION SEMIANNUAL REPORT**  
**Reporting period: July 1 – December 31, 2003**

Entity/System	Description	
316.MR1 Raw Mill	<b>Startups: 99 (total startup time: 1.6 hrs.)</b> Startup of the Raw Mill commences when 317.FZ3 and 411.FZ1 dedusting filters and rotary feeder 411.RF3 are started as part of the startup sequence.	
	<b>Shutdowns: 100 (total shutdown time: 1797.6hrs.)</b> Shutdown of the Raw Mill commences when Raw Mill 316.MR1 is stopped.	
	<b>Malfunctions: 3</b>	
	<u>Description</u> Mech, elect, or equipment failure of system component.	<u>Duration</u> 23.29 hrs
416.KD1 Kiln	<b>Startups: 19(total startup time: 217.2hrs.)</b> Startup of the Kiln commences when the main baghouse dust collector fan 413.FZ1 is started as part of the kiln startup sequence.	
	<b>Shutdowns: 19(total shutdown time: 1010.9hrs.)</b> Shutdown of the Kiln commences when fuel flow to the main burner pipe is terminated.	
	<b>Malfunctions: 7</b>	
	<u>Description</u> System Failure of Electrical Power	<u>Duration</u> 56.67hrs
	<u>Description</u> Unplanned shutdown of equipment	<u>Duration</u> 0.25hrs
	<u>Description</u> Blockage/Material Restriction	<u>Duration</u> 4.67hrs

I certify that the information contained in this report is true, accurate, and complete.

Name: Craig Puljan, Plant Manager

Signature: 

Date: January 28, 2004